

convince us of the correctness of Hillebrand's finding. Though not known from the Koolau Range of Oahu, this taxon, perhaps in several varieties and forms, appears on the Island of Kauai! It is significant that Skottsberg, mentioning Chromosome Numbers in Hawaiian Flowering Plants (Ark. f. Bot., Stockholm) 64. 1953, lists 36 as the 2N for a Kauai plant and 54 or 56 for plant 6,828 from Hawaii.

The more we become familiar with native taxa, the more do we realize how complicated the flora of the Hawaiian Islands is; *Rumex* is just one example. Although one of us has observed and collected the native taxa since 1922, we have solved just a few puzzles and drawn attention to many, many more. The new generation of botanists should concentrate on collecting more and better material, growing seeds under controlled conditions, making additional chromosome counts, and using newer and preciser methods unknown to workers of the past. The present fad to engage in a wealth of costly ecological experiments and studies without first untangling the taxonomy of our flora is placing the cart before the horse.

ADDITIONAL NOTES ON THE GENUS PETITIA. III

Harold N. Moldenke

PETITIA Jacq.

Additional & emended bibliography: Scop., *Introd. Hist. Nat.* 197. 1777; Schreb. in L., *Gen. Pl.*, ed. 8 [9], 1: 72. 1789; J. F. Gmel. in L., *Syst. Nat.*, ed. 13, pr. 1, 2: 245 & 943. 1789; Schreb. in L., *Gen. Pl.*, ed. 8 [9], 2: 863. 1791; Haenke in L., *Gen. Pl.*, ed. 8 [10], 1: 104 (1791) and 2: 803. 1791; J. F. Gmel. in L., *Syst. Nat.*, ed. 13, pr. 2, 2: 245 & 943. 1796; H.B.K., *Nov. Gen. & Sp. Pl.*, ed. folio, 2: 201 (1817) and ed. quart., 2: 248. 1818; Pers., *Sp. Pl.* 3: 358. 1819; Bischoff, *Handb. Bot. Term.* 1: Erk. Taf. 32, pl. 40, fig. 1718a. 1830; Bischoff, *Organ. Syst. Art. Regist.* 13. 1849; Schnitzl., *Icon. Fam. Nat. Reg. Veg.* 137. 1856; Barnhart, *Bull. Torrey Bot. Club* 29: 590. 1902; Metcalfe & Chalk, *Anat. Dicot.* 1035, 1037, & 1041. 1950; Kribs, *Comm. For. Woods*, ed. 1, 143, fig. 331 (1950) and ed. 2, 160--161, fig. 331. 1959; Hocking, *Excerpt. Bot. A.* 6: 533. 1963; F. A. Barkley, *List Ord. Fam. Anthoph.* 76 & 196. 1965; Airy Shaw in Willis, *Dict. Flow. Pl.*, ed. 7, 856 & 1021. 1966; Moldenke, *Phytologia* 15: 236--240. 1967; Anon., *Biol. Abstr.* 48 (23): B.A.S.I.C. S.132. 1967; Moldenke, *Biol. Abstr.* 48: 10560. 1967; Dandy, *Reg. Veg.* 51: [Ind. Gen. Vasc. Pl.] 71 & 121. 1967; Uphof, *Dict. Econ. Pl.*, ed. 2, 398 & 541. 1968; Moldenke, *Résumé Suppl.* 17: 2. 1968; Hocking, *Excerpt. Bot. A.* 13: 569--570. 1968; Kribs, *Comm. For. Woods*, ed. 3, 160--161, fig. 331. 1968; Stearn, *Humb. Bonpl. Kunth Trop. Am. Bot.* 16. 1968; Moldenke, *Biol. Abstr.* 50: 6948. 1969; Anon., *Torrey Bot. Club Ind. Am. Bot. Lit.* 3: 306 & 308. 1969; Moldenke, *Phytologia* 18: 509. 1969; A. L. Moldenke, *Phytologia* 18: 124--

125. 1969.

It should be noted here that the Humboldt, Bonpland, & Kunth references given in the above bibliography have been authenticated by Barnhart (1902) as to exact date of publication.

Airy Shaw (1966) places the genus Scleroön Benth. in the synonymy of Petitia, but it belongs, instead, in the synonymy of Citharexylum B. Juss.

PETITIA DOMINGENSIS Jacq.

Emended synonymy: Citharexylum melanocardium Sw. ex J. F.

Gmel. in L., Syst. Nat., ed. 13, pr. 1, 2: 943. 1789.

Additional bibliography: J. F. Gmel. in L., Syst. Nat., ed. 13, pr. 1, 2: 245 & 943 (1789) and pr. 2, 2: 245 & 943. 1796; Bischoff, Handb. Bot. Term. 1: Erk. Taf. 32, pl. 40, fig. 1718a. 1830; Bischoff, Organ. Syst. Art. Regist. 13. 1849; Garman, Mycologia 7: 333. 1915; J. C. Arth., Mycologia 9: 62. 1917; Kribs, Comm. For. Woods, ed. 1, 143, fig. 331 (1950) and ed. 2, 160--161, fig. 331. 1959; Moldenke, Phytologia 15: 236--240. 1967; Kribs, Comm. For. Woods, ed. 3, 160--161, fig. 331. 1968; Moldenke, Résumé Suppl. 17: 2. 1968; Uphof, Dict. Econ. Pl., ed. 2, 398. 1968; Hocking, Excerpt. Bot. A.13: 570. 1968; A. L. Moldenke, Phytologia 18: 124--125. 1969.

Additional illustrations: Bischoff, Handb. Bot. Term. 1: pl. 40, fig. 1718a. 1830; Kribs, Comm. For. Woods, ed. 1, fig. 331 (1950), ed. 2, fig. 331 (1959), and ed. 3, fig. 331. 1968.

Uphof (1968) retains P. poeppigii Schau. as a distinct species (surely it deserves no more than varietal or form status!) and accredits it to "Scheuer". He records the vernacular variant name "capa blanco" for the species and tells us that its wood is light-brown to medium-brown, often variegated, with fine straight to somewhat wavy grain, medium to high luster, very hard, heavy, tough, and strong, it air-seasons rapidly, is easy to work, moderately resistant to dry-wood termites, fairly durable when in contact with the soil, and is recommended for furniture, cabinet-making, turned articles, novelty items, interior paneling, rollers in coffee-hulling mills, carts, posts, poles, piling, and props. Of what he calls P. poeppigii he says "Tree. West Indies. Wood strong, palisander [=Dalbergia]-colored; used for navy construction". Kribs (1968) records the additional vernacular names "fiddlewood", "guayo prieto", "roble guayo", "capa de sabanna", "bois d'sortie", "chene calle bassie", and "capa wood" -- the last being its commercial name. He describes the wood in detail as "Color light yellowish brown with darker brown streaks and satiny luster; appears waxy. Odor and taste not distinct. Hard and heavy, sp. gr. 0.95 (air dry); weight, 59 lbs. per cu. ft. Grain straight to wavy or roey. Texture fine. Easily to turn and carve and takes a lustrous finish. Growth rings fairly distinct due to color zones and an increase in fiber density. Vessels barely visible without lens; numerous, evenly distributed to zonate, solitary and in radial groups of 2--4; tang. diam. 70u to 215u, av., 156u; lumina with tyloses; pits alternate, diam. 7u to 10u.

Fibers septate in part with simple pits. Parenchyma not distinct with lens; paratracheal scanty to vasicentric uniseriate. Rays barely visible without lens on the cross section; inconspicuous on the radial, heterogeneous type III, 1--3, mostly 2--3 cells wide and 10--20 cells high; lumina with very small crystals; ray-vessel pits oval to elongate, simple to half-bordered. Ripple marks absent. Gum ducts absent. Uses and source of supply furniture and cabinets, interior finish, millwork, flooring, tool and knife handles, rollers, posts, and turnery. West Indies."

Arthur (1917) describes the fungus, Olivea petitiae Arth., while Garman (1915) describes Septoria petitiae Garman from this species.

Stimson found the plant in pastures with extensive secondary growth and in dry scrub forests on mountainsides, describing it as a small tree, with red fruit in July, and called "capá blanco", growing to be 20 or 30 feet tall, with a stem diameter of 6 inches at breast height. Little says that the fruits are red. Gooding, Loveless, & Proctor (1965) tell us that Maycock recorded the species from the Barbados islands, but that there has been "no modern record of it" from there. Gillis 6843 was taken from plants that had escaped from cultivation.

Additional citations: FLORIDA: Dade Co.: Gillis 6843 (Ft--3011). BAHAMA ISLANDS: Grand Bahama: Gillis 7791 (Go). New Providence: J. Popenoe s.n. [Sept. 25, 1963] (Ft--2204, Ft). CUBA: Oriente: León 12045b (W--2289328). PUERTO RICO: E. L. Little 13080 (N); Stimson 3181 (N), 3279 (N); Woodbury & Stimson 1313 (W--2512419).

PETITIA DOMINGENSIS var. EKMANI Moldenke

Additional bibliography: Moldenke, *Phytologia* 15: 240. 1967.

Liogier describes this plant as a shrub or tree, 2--8 m. tall, the branches spreading, and the flowers greenish, growing in open places on rocks above cliffs and in coastal thickets on dogtooth limestone or "uncommon in thickets near seashore on dogtooth limestone", at altitudes of 10--20 m., flowering in February.

Additional citations: HISPANIOLA: Dominican Republic: Liogier 13759 (Ac, N), 13918 (N, Z).

PETITIA URBANII Ekm.

Additional bibliography: Hocking, *Excerpt. Bot. A.6*: 533. 1963; Moldenke, *Phytologia* 15: 240. 1967; Hocking, *Excerpt. Bot. A.13*: 570. 1968.